DETAILED ESTIMATE

WARD NO.10

1) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT BEL 2ND BLOCK AND SURROUNDING AREAS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT BEL 2ND BLOCK AND SURROUNDING AREAS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Cum	2	286.80	0.50	0.40	114.72		
	1st Main Road	Cum	2	222.00	0.60	0.40	106.56		
	2nd Main Road	Cum	2	221.50	0.70	0.40	124.04		
	3rd Main Road	Cum	2	221.50	0.68	0.40	120.50		
	4th Main Road 1st Cross Road	Cum	2	170.00	0.70	0.40	95.20		
	4th Main Road 5th Cross Road	Cum	2	164.00	0.70	0.40	91.84		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**652.86**	**166.42**	**108648.30**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	BEL 2ND BLOCK								
	1st Main Road	Sqm	2	222.00	0.60		266.40		
	2nd Main Road	Sqm	2	221.50	0.70		310.10		
	3rd Main Road	Sqm	2	221.50	0.68		301.24		
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Sqm	2	286.80	1.80		1032.48		
	4th Main Road 1st Cross Road	Sqm	2	170.00	1.80		612.00		
	4th Main Road 5th Cross Road	Sqm	2	164.00	1.80		590.40		
	Sub Total						**3112.62**		
	Consider 5% Qnty for Removing						**155.63**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**155.63**	**65.72**	**10228.07**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Cover Slab								
	BEL 2ND BLOCK								
	1st Main Road	Sqm	2	222.00	0.60		266.40		
	2nd Main Road	Sqm	2	221.50	0.70		310.10		
	3rd Main Road	Sqm	2	221.50	0.68		301.24		
	Sub Total						**877.74**		
	Consider 30% Qnty for Removing & Refixing						**263.32**		
	Basic rate							76.00	

	Area weightage 6%							4.56	
	Total						**263.32**	**80.56**	**21213.22**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	BEL 2ND BLOCK								
	1st Main Road	Sqm	2	222.00	0.60		266.40		
	2nd Main Road	Sqm	2	221.50	0.70		310.10		
	3rd Main Road	Sqm	2	221.50	0.68		301.24		
	Sub Total						**877.74**		
	Consider 5% Qnty for Refixing						**43.89**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**43.89**	**665.68**	**29214.70**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Sqm	2	286.80	1.80		1032.48		
	4th Main Road 1st Cross Road	Sqm	2	170.00	1.80		612.00		
	4th Main Road 5th Cross Road	Sqm	2	164.00	1.80		590.40		
	Sub Total						**2234.88**		
	Consider 5% Qnty for Refixing						**111.74**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**111.74**	**825.74**	**92271.49**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road cutting portions								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Cum	1	286.80	1.70	0.23	112.14		
		Cum	1	286.80	5.50	0.23	362.80		
	1st Main Road	Cum	3	6.00	0.60	0.23	2.48		
		Cum	1	222.00	6.10	0.23	311.47		
	2nd Main Road	Cum	1	221.50	5.00	0.23	254.73		
		Cum	1	221.50	6.00	0.23	305.67		
	3rd Main Road	Cum	1	221.50	1.00	0.23	50.95		
		Cum	1	221.50	6.20	0.23	315.86		
	4th Main Road 5th Cross Road	Cum	1	164.00	6.00	0.23	226.32		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**1942.41**	**86.92**	**168834.26**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6	Cum					2595.27		

	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5 Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						2595.27	122.96	319113.88
8	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	Road cutting portions								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Cum	1	286.80	1.70	0.23	112.14		
		Cum	1	286.80	5.50	0.23	362.80		
	1st Main Road	Cum	3	6.00	0.60	0.23	2.48		
		Cum	1	222.00	6.10	0.23	311.47		
	2nd Main Road	Cum	1	221.50	5.00	0.23	254.73		
		Cum	1	221.50	6.00	0.23	305.67		
	3rd Main Road	Cum	1	221.50	1.00	0.23	50.95		
		Cum	1	221.50	6.20	0.23	315.86		
	4th Main Road 5th Cross Road	Cum	1	164.00	6.00	0.23	226.32		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						1942.41	1768.08	3434335.92
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Sqm	1	286.80	1.70		487.56		
		Sqm	1	286.80	5.50		1577.40		
	1st Main Road	Sqm	3	6.00	0.60		10.80		
		Sqm	1	222.00	6.10		1354.20		
	2nd Main Road	Sqm	1	221.50	5.00		1107.50		
		Sqm	1	221.50	6.00		1329.00		
	3rd Main Road	Sqm	1	221.50	1.00		221.50		
		Sqm	1	221.50	6.20		1373.30		
	4th Main Road 5th Cross Road	Sqm	1	164.00	6.00		984.00		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						8445.26	13.78	116375.68

10	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					8445.26		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**8445.26**	**27.56**	**232751.37**
11	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Cum	1	286.80	1.70	0.05	24.38		
		Cum	1	286.80	5.50	0.05	78.87		
	1st Main Road	Cum	3	6.00	0.60	0.05	0.54		
		Cum	1	222.00	6.10	0.05	67.71		
	2nd Main Road	Cum	1	221.50	5.00	0.05	55.38		
		Cum	1	221.50	6.00	0.05	66.45		
	3rd Main Road	Cum	1	221.50	1.00	0.05	11.08		
		Cum	1	221.50	6.20	0.05	68.67		
	4th Main Road 5th Cross Road	Cum	1	164.00	6.00	0.05	49.20		
	Sub Total						**422.26**		
	Consider 5% qty for Profile correction and Dipression filling						**21.11**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**443.38**	**7120.02**	**3156847.06**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Sqm	1	286.80	5.50		1577.40		
	1st Main Road	Sqm	1	222.00	6.10		1354.20		
	2nd Main Road	Sqm	1	221.50	6.00		1329.00		
	3rd Main Road	Sqm	1	221.50	6.20		1373.30		
	4th Main Road 1st Cross Road	Sqm	1	170.00	6.10		1037.00		
	4th Main Road 5th Cross Road	Sqm	1	164.00	6.00		984.00		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**7654.90**	**3.18**	**24342.58**
13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Sqm	1	286.80	5.50		1577.40		

	1st Main Road	Sqm	1	222.00	6.10		1354.20		
	2nd Main Road	Sqm	1	221.50	6.00		1329.00		
	3rd Main Road	Sqm	1	221.50	6.20		1373.30		
	4th Main Road 1st Cross Road	Sqm	1	170.00	6.10		1037.00		
	4th Main Road 5th Cross Road	Sqm	1	164.00	6.00		984.00		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**7654.90**	**12.72**	**97370.33**
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Cum	1	286.80	5.50	0.04	63.10		
	1st Main Road	Cum	1	222.00	6.10	0.04	54.17		
	2nd Main Road	Cum	1	221.50	6.00	0.04	53.16		
	3rd Main Road	Cum	1	221.50	6.20	0.04	54.93		
	4th Main Road 1st Cross Road	Cum	1	170.00	6.10	0.04	41.48		
	4th Main Road 5th Cross Road	Cum	1	164.00	6.00	0.04	39.36		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Cum	1	286.80	5.50	0.04	6.31		
	1st Main Road	Cum	1	222.00	6.10	0.04	5.42		
	2nd Main Road	Cum	1	221.50	6.00	0.04	5.32		
	3rd Main Road	Cum	1	221.50	6.20	0.04	5.49		
	4th Main Road 1st Cross Road	Cum	1	170.00	6.10	0.04	4.15		
	4th Main Road 5th Cross Road	Cum	1	164.00	6.00	0.04	3.94		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**336.82**	**8118.54**	**2734450.92**
15	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	336.82	117.00	**3152.59**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**3152.59**	**28.62**	**90227.24**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	BEL 2ND BLOCK								
	2nd Block 4th Main Road	Sqm	2	286.80	0.10		57.36		
	1st Main Road	Sqm	2	222.00	0.10		44.40		
	2nd Main Road	Sqm	2	221.50	0.10		44.30		
	3rd Main Road	Sqm	2	221.50	0.10		44.30		
	4th Main Road 1st Cross Road	Sqm	2	170.00	0.10		34.00		

	4th Main Road 5th Cross Road	Sqm	2	164.00	0.10		32.80		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						257.16	542.72	139565.88
								Sub Total	**10775790.89**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								220000
								Miscellenious and rounding	4209
								TOTAL AMOUNT	**11000000**
RUPEES ONE CRORE AND TEN LAKHS ONLY									

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

2) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT NANJAPPA LAYOUT AND SURROUNDING AREA IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT NANJAPPA LAYOUT AND SURROUNDING AREA IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	NANJAPPA LAYOUT								
	1st A Main Road	Cum	2	391.50	0.80	0.40	250.56		
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Cum	1	96.50	0.70	0.40	27.02		
	Subbanna Road 2nd Cross	Cum	2	97.00	0.60	0.40	46.56		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**324.14**	**166.42**	**53943.38**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	NANJAPPA LAYOUT								
	1st A Main Road	Sqm	2	391.50	0.80		626.40		
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Sqm	1	96.50	0.70		67.55		
	Subbanna Road 2nd Cross	Sqm	2	97.00	0.60		116.40		
	Sub Total						**810.35**		
	Consider 5% Qnty for Removing						**40.52**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**40.52**	**65.72**	**2662.81**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Drain slab								
	NANJAPPA LAYOUT								
	1st A Main Road	Sqm	2	391.50	0.80		626.40		
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Sqm	1	96.50	0.70		67.55		
	Subbanna Road 2nd Cross	Sqm	2	97.00	0.60		116.40		
	Sub Total						**810.35**		
	Consider 30% Qnty for Removing & Refixing						**243.11**		

	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**243.11**	**80.56**	**19584.54**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	NANJAPPA LAYOUT								
	1st A Main Road	Sqm	2	391.50	0.80		626.40		
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Sqm	1	96.50	0.70		67.55		
	Subbanna Road 2nd Cross	Sqm	2	97.00	0.60		116.40		
	Sub Total						**810.35**		
	Consider 5% Qnty for Removing						**40.52**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**40.52**	**665.68**	**26971.69**
5	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+ I.No.11	Cum					450.43		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**450.43**	**122.96**	**55384.26**
6	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	NANJAPPA LAYOUT								
	1st A Main Road	Sqm	1	391.50	5.20		2035.80		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**2035.80**	**3.18**	**6473.84**
7	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	NANJAPPA LAYOUT								
	1st A Main Road	Sqm	1	391.50	5.20		2035.80		

	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						2035.80	12.72	25895.38
8	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	NANJAPPA LAYOUT								
	1st A Main Road	Cum	1	391.50	5.20	0.04	81.43		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	NANJAPPA LAYOUT								
	1st A Main Road	Cum	1	391.50	5.20	0.04	8.14		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						89.58	8118.54	727219.84
9	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		8%	89.58	117.00	838.42		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						838.42	28.62	23995.69
10	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	NANJAPPA LAYOUT								
	1st A Main Road	Sqm	2	391.50	0.10		78.30		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						78.30	542.72	42494.98
11	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Cum	1	96.50	4.00	0.15	57.90		
	Subbanna Road 2nd Cross	Cum	1	97.00	4.70	0.15	68.39		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						126.29	827.86	104546.30
12	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Cum	1	96.50	4.00	0.15	57.90		

	Subbanna Road 2nd Cross	Cum	1	97.00	4.70	0.15	68.39		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						**126.29**	**3986.66**	**503455.36**
13	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Cum	1	96.50	4.00	0.15	57.90		
	Subbanna Road 2nd Cross	Cum	1	97.00	4.70	0.15	68.39		
	Sub Total						**126.29**		
	Consider 5% qty for camber correction						**6.31**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**132.60**	**6217.96**	**824496.83**
14	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 2nd Cross Road (unnamed)	Sqm	2	96.50	0.10		19.30		
	Subbanna Road 2nd Cross	Sqm	2	97.00	0.10		19.40		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						**38.70**	**685.82**	**26541.23**
								Sub Total	**2443666.13**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								50000
								Miscellenious and rounding	6334
								TOTAL AMOUNT	**2500000**
								RUPEES TWENTY FIVE LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

3) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT C. RAMAIAH LAYOUT 1ST TO 7TH CROSS ROADS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT C. RAMAIAH LAYOUT 1ST TO 7TH CROSS ROADS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Cum	2	24.75	0.60	0.40	11.88		
	5th 'A Cross Road	Cum	2	77.20	0.60	0.40	37.06		
	2nd Cross Road	Cum	2	103.40	0.60	0.40	49.63		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**98.57**	**166.42**	**16403.69**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Sqm	2	24.75	0.60		29.70		
	5th 'A Cross Road	Sqm	2	77.20	0.60		92.64		
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	CHAMUNDESHWARI LAYOUT								
	2nd Cross Road	Sqm	2	103.40	1.80		372.24		
	Sub Total						**494.58**		
	Consider 5% Qnty for Removing						**24.73**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**24.73**	**65.72**	**1625.19**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Sqm	2	24.75	0.60		29.70		
	5th 'A Cross Road	Sqm	2	77.20	0.60		92.64		
	Sub Total						**122.34**		
	Consider 30% Qnty for Removing & Refixing						**36.70**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**36.70**	**80.56**	**2956.71**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								

	5th Cross Road	Sqm	2	24.75	0.60		29.70		
	5th 'A Cross Road	Sqm	2	77.20	0.60		92.64		
	Sub Total						**122.34**		
	Consider 5% Qnty for Refixing						**6.12**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**6.12**	**665.68**	**4071.96**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	CHAMUNDESHWARI LAYOUT								
	2nd Cross Road	Sqm	2	103.40	1.80		372.24		
	Sub Total						**372.24**		
	Consider 5% Qnty for Refixing						**18.61**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**18.61**	**825.74**	**15368.67**
6	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.12	Cum					356.32		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**356.32**	**122.96**	**43813.39**
7	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Sqm	1	24.75	4.60		113.85		
	5th 'A Cross Road	Sqm	1	77.20	4.20		324.24		
	2nd Cross Road	Sqm	1	103.40	4.60		475.64		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**913.73**	**3.18**	**2905.66**
8	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	5th Cross Road	Sqm	1	24.75	4.60		113.85		

	5th 'A Cross Road	Sqm	1	77.20	4.20		324.24		
	2nd Cross Road	Sqm	1	103.40	4.60		475.64		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						913.73	12.72	11622.65
9	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of								
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Cum	1	24.75	4.60	0.04	4.55		
	5th 'A Cross Road	Cum	1	77.20	4.20	0.04	12.97		
	2nd Cross Road	Cum	1	103.40	4.60	0.04	19.03		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Cum	1	24.75	4.60	0.04	0.46		
	5th 'A Cross Road	Cum	1	77.20	4.20	0.04	1.30		
	2nd Cross Road	Cum	1	103.40	4.60	0.04	1.90		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						40.20	8118.54	326398.76
10	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		8%	40.20	117.00	376.31		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						376.31	28.62	10770.01
11	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	CHAMUNDESHWARI LAYOUT								
	5th Cross Road	Sqm	2	24.75	0.10		4.95		
	5th 'A Cross Road	Sqm	2	77.20	0.10		15.44		
	2nd Cross Road	Sqm	2	103.40	0.10		20.68		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						41.07	542.72	22289.51
12	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	C RAMAIAH LAYOUT								
	3'D Cross Road	Cum	1	32.12	6.20	0.15	29.87		
	3'C Cross Road	Cum	1	32.01	5.80	0.15	27.85		
	3'B Cross Road	Cum	1	29.50	5.70	0.15	25.22		
	3'A Cross Road	Cum	1	33.00	5.90	0.15	29.21		
	2'A Cross Road	Cum	1	33.50	5.70	0.15	28.64		
	MUNESHWARA LAYOUT								
	6th Cross Road	Cum	1	125.50	4.60	0.15	86.60		
	In between 5th & 6th Cross	Cum	1	38.20	5.30	0.15	30.37		
	Basic rate							781.00	

	Area weightage 6%							46.86	
	Total						257.75	827.86	213384.47
13	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	C RAMAIAH LAYOUT								
	3'D Cross Road	Cum	1	32.12	6.20	0.15	29.87		
	3'C Cross Road	Cum	1	32.01	5.80	0.15	27.85		
	3'B Cross Road	Cum	1	29.50	5.70	0.15	25.22		
	3'A Cross Road	Cum	1	33.00	5.90	0.15	29.21		
	2'A Cross Road	Cum	1	33.50	5.70	0.15	28.64		
	MUNESHWARA LAYOUT								
	6th Cross Road	Cum	1	125.50	4.60	0.15	86.60		
	In between 5th & 6th Cross	Cum	1	38.20	5.30	0.15	30.37		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						257.75	3986.66	1027578.76
14	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	C RAMAIAH LAYOUT								
	3'D Cross Road	Cum	1	32.12	6.20	0.15	29.87		
	3'C Cross Road	Cum	1	32.01	5.80	0.15	27.85		
	3'B Cross Road	Cum	1	29.50	5.70	0.15	25.22		
	3'A Cross Road	Cum	1	33.00	5.90	0.15	29.21		
	2'A Cross Road	Cum	1	33.50	5.70	0.15	28.64		
	MUNESHWARA LAYOUT								
	6th Cross Road	Cum	1	125.50	4.60	0.15	86.60		
	In between 5th & 6th Cross	Cum	1	38.20	5.30	0.15	30.37		
	Sub Total						**257.75**		
	Consider 5% qty for camber correction						**12.89**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						270.64	6217.96	1682841.22
15	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								

	C RAMAIAH LAYOUT								
	3'D Cross Road	Sqm	2	32.12	0.10		6.42		
	3'C Cross Road	Sqm	2	32.01	0.10		6.40		
	3'B Cross Road	Sqm	2	29.50	0.10		5.90		
	3'A Cross Road	Sqm	2	33.00	0.10		6.60		
	2'A Cross Road	Sqm	2	33.50	0.10		6.70		
	MUNESHWARA LAYOUT								
	6th Cross Road	Sqm	2	125.50	0.10		25.10		
	In between 5th & 6th Cross	Sqm	2	38.20	0.10		7.64		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						64.77	685.82	44417.82
								Sub Total	**3426448.47**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								70000
	Miscellenious and rounding								3552
	TOTAL AMOUNT								**3500000**
	RUPEES THIRTY FIVE LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

4) IMPROVEMENTS AND ASPHALTING TO ROADS AND DAINS AT MUNESHWARA LAYOUT 1ST TO 8TH CROSS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DAINS AT MUNESHWARA LAYOUT 1ST TO 8TH CROSS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Cum	2	160.10	0.70	0.40	89.66		
	5th Cross Road	Cum	2	127.60	0.65	0.40	66.35		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**156.01**	**166.42**	**25962.85**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Sqm	2	160.10	0.70		224.14		
	5th Cross Road	Sqm	2	127.60	0.65		165.88		
	Sub Total						**390.02**		
	Consider 5% Qnty for Removing						**19.50**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**19.50**	**65.72**	**1281.61**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Sqm	2	160.10	0.70		224.14		
	5th Cross Road	Sqm	2	127.60	0.65		165.88		
	Sub Total						**390.02**		
	Consider 30% Qnty for Removing & Refixing						**117.01**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**117.01**	**80.56**	**9426.00**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Sqm	2	160.10	0.70		224.14		
	5th Cross Road	Sqm	2	127.60	0.65		165.88		
	Sub Total						**390.02**		
	Consider 5% Qnty for Refixing						**19.50**		
	Basic rate							628.00	

	Area weightage 6%							37.68	
	Total						19.50	665.68	12981.43
5	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6	Cum					401.61		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs2.5Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						401.61	122.96	49382.21
6	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Cum	1	160.10	4.60	0.15	110.47		
	3rd Cross Road	Cum	1	72.60	4.50	0.15	49.01		
	5th Cross Road	Cum	1	127.60	4.50	0.15	86.13		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						245.60	827.86	203325.73
7	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Cum	1	160.10	4.60	0.15	110.47		
	3rd Cross Road	Cum	1	72.60	4.50	0.15	49.01		
	5th Cross Road	Cum	1	128.00	4.50	0.15	86.40		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						245.87	3986.66	980216.04

8	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Cum	1	160.10	4.60	0.15	110.47		
	3rd Cross Road	Cum	1	72.60	4.50	0.15	49.01		
	5th Cross Road	Cum	1	128.00	4.50	0.15	86.40		
	Sub Total						**245.87**		
	Consider 5% qty for camber correction						**12.29**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**258.17**	**6217.96**	**1605276.43**
9	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	MUNESHWARA LAYOUT								
	2nd Cross Road	Sqm	2	160.10	0.10		32.02		
	3rd Cross Road	Sqm	2	75.00	0.10		15.00		
	5th Cross Road	Sqm	2	128.00	0.10		25.60		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						**72.62**	**685.82**	**49804.25**
								Sub Total	**2937656.55**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								60000
								Miscellenious and rounding	2343
								TOTAL AMOUNT	**3000000**
								RUPEES THIRTY LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

5) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAIN AT VENUGOPALSWAMY TEMPLE ROAD AND GANJANNA YUVAKARA SANGA ROADS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK :IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAIN AT VENUGOPALSWAMY TEMPLE ROAD AND GANJANNA YUVAKARA SANGA ROADS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 1st Cross Road (unnamed)	Cum	1	84.50	0.60	0.40	20.28		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**20.28**	**166.42**	**3375.00**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 1st Cross Road (unnamed)	Sqm	1	84.50	0.60		50.70		
	Sub Total						**50.70**		
	Consider 5% Qnty for Removing						**2.54**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**2.54**	**65.72**	**166.60**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 1st Cross Road (unnamed)	Sqm	1	84.50	0.60		50.70		
	Sub Total						**50.70**		
	Consider 30% Qnty for Removing & Refixing						**15.21**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**15.21**	**80.56**	**1225.32**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 1st Cross Road (unnamed)	Sqm	1	84.50	0.60		50.70		
	Sub Total						**50.70**		
	Consider 5% Qnty for Refixing						**2.54**		
	Basic rate							628.00	

	Area weightage 6%							37.68	
	Total						2.54	665.68	1687.50
5	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6	Cum					229.32		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						229.32	122.96	28197.00
6	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple Main Road	Cum	1	220.60	4.90	0.15	162.14		
	Venugopalswami temple 1st Cross Road (unnamed)	Cum	1	84.50	3.70	0.15	46.90		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						209.04	827.86	173054.61
7	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple Main Road	Cum	1	220.60	4.90	0.15	162.14		
	Venugopalswami temple 1st Cross Road (unnamed)	Cum	1	84.50	3.70	0.15	46.90		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						209.04	3986.66	833365.43

8	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami	Cum	1	220.60	4.90	0.15	162.14		
	Venugopalswami temple 1st Cross Road (unnamed)	Cum	1	84.50	3.70	0.15	46.90		
	Sub Total						**209.04**		
	Consider 5% qty for camber correction						**10.45**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**219.49**	**6217.96**	**1364782.68**
9	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami	Sqm	2	220.60	0.10		44.12		
	Venugopalswami temple 1st Cross Road (unnamed)	Sqm	2	84.50	0.10		16.90		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						61.02	**685.82**	**41848.74**
								Sub Total	**2447702.88**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								50000
	Miscellenious and rounding								2297
	TOTAL AMOUNT								**2500000**
	RUPEES TWENTY FIVE LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
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